

DERWENT-ACC-NO: 1994-025960  
DERWENT-WEEK: 200124  
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TITLE: Ion exchange resin dispersed into polyurethane polymer - where ion exchange material is pref. second polymer chemically modified after dispersion

INVENTOR: JAY, W H; LAWSON, F ; LAWSON, F G

PATENT-ASSIGNEE: UNIV MONASH[MONU]

PRIORITY-DATA: 1992AU-0003151 (June 25, 1992)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9400237 A1	January 6, 1994	E	040	B01J 039/18
AU 9343000 A	January 24, 1994	N/A	000	B01J 039/18
ZA 9304593 A	April 27, 1994	N/A	038	B01J 000/00
EP 647160 A1	April 12, 1995	E	000	B01J 039/18
JP 07508456 W	September 21, 1995	N/A	014	B01J 041/14
AU 664760 B	November 30, 1995	N/A	000	B01J 039/18
EP 647160 A4	August 30, 1995	N/A	000	B01J 039/18
NZ 252953 A	October 29, 1996	N/A	000	B01J 039/18
EP 647160 B1	September 2, 1998	E	000	B01J 039/18
DE 69320813 E	October 8, 1998	N/A	000	B01J 039/18
SG 78249 A1	February 20, 2001	N/A	000	B01J 039/18
US 6203708 B1	March 20, 2001	N/A	000	B01J 039/18

DESIGNATED-STATES: AU CA JP NZ US AT BE CH DE DK ES FR GB GR IE  
IT LU MC NL PT S  
E AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE AT BE CH DE DK  
ES FR GB GR  
IE IT LI LU MC NL PT SE

CITED-DOCUMENTS: 5.Jnl.Ref; DD 284416 ; DD 284473 ; DD 284474 ; DD  
284475 ; DE  
3019615 ; GB 944903 ; JP 56033044 ; US 3094494 ; 2.Jnl.Ref ; EP 45823 ; JP  
47013001 ; US 4342839

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
WO 9400237A1	N/A	1993WO-AU00312	June 25, 1993
AU 9343000A	N/A	1993AU-0043000	June 25, 1993
AU 9343000A	Based on	WO 9400237	N/A
ZA 9304593A	N/A	1993ZA-0004593	June 25, 1993
EP 647160A1	N/A	1993EP-0912462	June 25, 1993
EP 647160A1	N/A	1993WO-AU00312	June 25, 1993
EP 647160A1	Based on	WO 9400237	N/A
JP 07508456W	N/A	1993WO-AU00312	June 25, 1993
JP 07508456W	N/A	1994JP-0501888	June 25, 1993
JP 07508456W	Based on	WO 9400237	N/A
AU 664760B	N/A	1993AU-0043000	June 25, 1993
AU 664760B	Previous Publ.	AU 9343000	N/A
AU 664760B	Based on	WO 9400237	N/A
EP 647160A4	N/A	1993EP-0912462	N/A
NZ 252953A	N/A	1993NZ-0252953	June 25, 1993
NZ 252953A	N/A	1993WO-AU00312	June 25, 1993
NZ 252953A	Based on	WO 9400237	N/A
EP 647160B1	N/A	1993EP-0912462	June 25, 1993
EP 647160B1	N/A	1993WO-AU00312	June 25, 1993
EP 647160B1	Based on	WO 9400237	N/A
DE 69320813E	N/A	1993DE-0620813	June 25, 1993
DE 69320813E	N/A	1993EP-0912462	June 25, 1993
DE 69320813E	N/A	1993WO-AU00312	June 25, 1993
DE 69320813E	Based on	EP 647160	N/A
DE 69320813E	Based on	WO 9400237	N/A
SG 78249A1	N/A	1996SG-0004013	June 25, 1993
US 6203708B1	Cont of	1993WO-AU00312	June 25, 1993
US 6203708B1	Cont of	1995US-0351321	February 3, 1995
US 6203708B1	Cont of	1997US-0972046	November 17,
1997			
US 6203708B1	N/A	1999US-0314526	May 17, 1999

INT-CL (IPC): B01J000/00; B01J039/18 ; B01J041/12 ; B01J041/14 ;  
B01J043/00 ; B01J047/00 ; C02F001/42 ; C08F291/00 ; C08J005/20 ;  
C08L075/04

ABSTRACTED-PUB-NO: EP 647160B

BASIC-ABSTRACT: Ion-exchange resin comprises an ion exchange material dispersed or distributed throughout a polyurethane matrix. The ion exchange material is pref. a second polymer which has been chemically modified after dispersion or distribution throughout the polyurethane matrix.

The polyurethane matrix and the second polymer opt. form an interpenetrating polymer system.

USE/ADVANTAGE - The ion exchange resin can be used for removing or recovering soluble electrolytes from waste water (claimed) or in a hydrometallurgical process (claimed). The ion exchange resin is easily produced in a variety of shapes and forms, extending the scope of industrial application, and combines desirable physical and chemical properties. The resin overcomes or alleviates the difficulties of prior art, including reaction between the liq. isocyanate cpd. of a polyurethane system and the reactive ligand of a dispersed ion exchange material.

ABSTRACTED-PUB-NO: US 6203708B

EQUIVALENT-ABSTRACTS: Ion-exchange resin comprises an ion exchange material

dispersed or distributed throughout a polyurethane matrix. The ion exchange material is pref. a second polymer which has been chemically modified after dispersion or distribution throughout the polyurethane matrix.

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USE/ADVANTAGE - The ion exchange resin can be used for removing or recovering soluble electrolytes from waste water (claimed) or in a hydrometallurgical process (claimed). The ion exchange resin is easily produced in a variety of shapes and forms, extending the scope of industrial application, and combines desirable physical and chemical properties. The resin overcomes or alleviates the difficulties of prior art, including reaction between the liq. isocyanate cpd. of a polyurethane system and the reactive ligand of a dispersed ion exchange material.

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WO 9400237A

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS:

ION EXCHANGE RESIN DISPERSE POLYURETHANE POLYMER ION  
EXCHANGE MATERIAL PREFER  
SECOND POLYMER CHEMICAL MODIFIED AFTER DISPERSE

DERWENT-CLASS: A25 A91 D15 J01 M25

CPI-CODES: A05-G01E; A10-E01; A12-M; A12-W11J; A12-W12F; D04-A01G;  
D04-B05;  
J01-D04; M25-B03; M25-G;

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1994-011970